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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,927	02/17/2004	B. Mark Hirst	200309715-1	1900
22879 7590 12/31/2007 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			EXAMINER PATEL, RAJNIKANT B	
			ART UNIT 2838	PAPER NUMBER
			NOTIFICATION DATE 12/31/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JERRY.SHORMA@HP.COM
mkraft@hp.com
ipa.mail@hp.com

Office Action Summary	Application No. 10/780,927	Applicant(s) HIRST, B. MARK	
	Examiner Rajnikant B. Patel	Art Unit 2838	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,7-20 and 31-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1,7-9,17-20 and 31-58 is/are rejected.
- 7) ☐ Claim(s) 10-16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>7/04,6/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) The invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) The invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

1. Claims 1, 7 and 52 are rejected under 35 U.S.C. 102(b) as being anticipated by Guerrero (U.S. Patent # 5,923,152).

Guerrera disclose the claimed subject matters an AC switching circuit (figure 1, 2, 5 and 7), including a control circuit (figure 2, item 70 and 74), a biasing circuit (figure 2, item 50 and 52) and charging storage capacitor (column 3, line 20-65).

2. Claims 31, 34, 35, 37-38 and 43-45 are rejected under 35 U.S.C. 102(b) as being anticipated by Church et al. (U.S. Patent # 5,923,152).

Church et al. discloses claimed subject matters a snubber circuit (figure 1-7 and 11), including a first energy storage device (figure 2, item 102), a second energy storage device (figure 2, item 104) and a resetting (column 7, line 50-70), a bias source (column 3, line 1-65), a plurality of diode (figure 2, item 106,108), an inductor (figure 2, item 110)

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 8-9, 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guerrera (U.S. Patent # 5,923,152).

Guerrera disclose the claimed subject matters as explained in the claim 1 and 7 above, except for a first Field Effect Transistor (FET) having a first source, a first gate and a first drain; a second FET having a second drain, a second source coupled to the first source and a second gate coupled to the first gate; a first diode having a first anode coupled to the first source and a first cathode coupled to the first drain; and a second diode having a second anode coupled to the second source and a second cathode coupled to the second drain. 9. (Currently Amended) The apparatus of claim 16 wherein the AC switching circuit comprises: a first Field Effect Transistor (FET) having a first source, a first gate and a first drain; a second FET having a second drain, a second source coupled to the first source and a second gate coupled to the first gate; a first diode having a first cathode coupled to the first source and a first anode coupled to the first drain; and a second diode having a second cathode coupled to the second source and a second anode coupled to the second drain. It would have been obvious one having ordinary skill in the art at the time the invention made to utilize above circuit configuration, since it has been held that a mere reversal of the essential working part s of a device involve only routine skill in the art. In re Einstein, 8 USPQ 167.

5. Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guerrera (U.S. Patent # 5,923,152).

Guerrera disclose the claimed subject matters as explained in the claims 1 and 7, above, except the, load comprises an inductive heating device or a single phase induction motor or the load comprises a fuser. It would have been obvious one having

ordinary skill in the art at the time the invention was utilize the switching circuit for telephonic equipment, since it has been held to be within the general skill of a worker in the art to select a known load on the basis of the suitability for intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

6. Claims 32-33 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Church et al. (U.S. Patent # 5,923,152).

Guerrera disclose the claimed subject matters as explained in the claims 1 and 7, above, except a DC switching, an AC switching, a fan. It would have been obvious one having ordinary skill in the art at the time the invention was utilize the switching circuit for telephonic equipment, since it has been held to be within the general skill of a worker in the art to select a known load on the basis of the suitability for intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

7. Claims 47-51 and 53-58 are rejected under 35 U.S.C. 102 (b) as being anticipated by Guerrera (U.S. Patent # 5,923,152) in combinations with Dan-Harry (U.S. Patent # 5,485,365).

Guerrera discloses claimed subject matters as explained in the claims 1, 7 and 52 above, except the utilization of the technique for current limiting device. Dan -Harry teaches the utilization of the similar technique for current limiting device (figure 2). It would have been obvious one having an ordinary skill in the art at the time the invention

was made to modify Guerrero's snubber circuit by utilizing the technique taught by Dan-Harry for the purpose of the providing improved snubber circuit.

8. For method claims 39-42, note that under MPEP 21 12.02, the principles of inherency, if a prior art device, in its normal and usual operation, would necessarily perform the method claimed, then the method claimed will be considered to be anticipated by the prior art device. When the prior art device is the same as a device described in the specification for carrying out the claimed method, it can be assumed the device "1 inherently performs the claimed process. In re King, 801 F.2d 1324, 231 USPQ 136 (Fed Cir. 1986). Therefore the previous rejections based on the apparatus will not be repeated.

Allowable Subject Matter

9. Claims 10-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rajnikant B. Patel whose telephone number is 571-272-2082. The examiner can normally be reached on 6.30-5.00; m-f.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Akm Ullah can be reached on 571-272-2361. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:
10/780,927
Art Unit: 2838

Page 8

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Rajnikant B Patel
Primary Examiner
Art Unit 2838
